

Order Efficiency Ltd

Project Health Control (PHC)

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To Whom it may Concern.

Proposal for deployment of Project Health Control (PHC) for a prospective project:

Nationwide Thorium Reactor Power Generation in Nigeria

Proposal Summary

This proposal introduces the **Project Health Control (PHC) Service** as an initial governance and monitoring framework for the nationwide development of Thorium Reactor power stations in Nigeria. The approach is structured to ensure that a dedicated **core PHC Consultant team** oversees the overall project, while **reactor-specific PHC teams** are deployed for the implementation and operation of individual reactors.

The PHC deployment will progress in two phases: a **2-month Setup Phase** to establish the PHC Systems and a **12-month renewable Continuation Phase**, during which the PHC Service will support ongoing project activities and scale its involvement as the project grows.



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Involved Parties

1. Project Promoters:

- Federal Government of Nigeria
- International Atomic Energy Agency (IAEA)
- State Governments (Akwa Ibom for the pilot phase)

2. PHC Consortium Teams:

- **Core Team:** Oversees overall project governance and coordination across all reactors.
- **Reactor-Specific Teams:** Assigned to each reactor to manage localized PHC Service implementation.
- Order Efficiency Ltd. as the PHC Service provider.

3. Technical and Local Partners:

- Danish nuclear energy experts
- Local engineering and construction firms
- Logistics and workforce training organizations

4. Stakeholders:

- Community leaders, environmental groups, regulatory bodies, and private sector investors.
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Objectives

1. Governance Establishment:

- Create a robust framework for overseeing and coordinating the multi-phase reactor deployment.

2. Risk and Compliance Management:

- Proactively mitigate risks and ensure compliance with nuclear safety, environmental, and financial standards.

3. Scalable Oversight:



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- Implement a scalable PHC Service model that grows with the project, adding resources as needed during renewals.

4. Localized Implementation:

- Deploy tailored PHC Service teams to individual reactors, ensuring project health is maintained at both macro and micro levels.
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Operational Strategy

The PHC Service will be deployed in two key phases:

- **Setup Phase:** A rapid 3-month deployment of core PHC Systems.
 - **Continuation Phase:** A renewable 12-month operational period focused on scalability and localized implementation.
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Phase 1: Setup Phase

Timeline: 3 Months

Focus: Establishing PHC Systems and deploying the Core PHC Team.

Actions:

1. Core Team Formation:

- Recruit and deploy a team of PHC Consultants (Strategists, Analysts, and Admins) to oversee the project.
- Assign roles for monitoring governance, risk management, and project efficiency.

2. PHC Systems Deployment:

- Set up digital tools and dashboards for monitoring project health metrics, including cost, schedule, and compliance.
- Develop standard operating procedures for PHC Service delivery across all reactors.

3. Stakeholder Engagement:

- Conduct workshops with project promoters, regulators, and technical experts to align on goals and expectations.
- Establish clear communication channels with state governments and local communities.

4. Risk and Feasibility Assessment:

- Oversee final feasibility studies and identify potential risks for the pilot reactor in Akwa Ibom State.
- Develop initial mitigation strategies and monitoring protocols.

Deliverables:

- Core PHC Team in place with defined roles and responsibilities.
 - Fully operational PHC Systems and dashboards.
 - Risk Mitigation Plan and Monitoring Framework.
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Phase 2: Continuation Phase

Timeline: 12 Months (Renewable)

Focus: Scalable governance and localized PHC Service deployment.

Actions:

1. Core Team Governance:

- Maintain oversight of the overall project, ensuring alignment with timelines, budgets, and safety standards.
- Review and adapt the PHC Service model as the project expands.

2. Localized Team Deployment:

- Form dedicated PHC teams for individual reactors as construction and operation begin.
- Train and integrate local PHC Consultants into project teams, focusing on regional requirements.

3. Project Monitoring and Reporting:

- Conduct regular audits and generate monthly Project Health Reports for each reactor and the overall project.
- Track key performance indicators (KPIs) and address deviations proactively.

4. Stakeholder Coordination:



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- Facilitate quarterly reviews with government agencies, technical partners, and community representatives.
- Update public and private stakeholders on project progress and any emerging risks.

5. Scalable Growth:

- Expand the PHC Service team at each renewal, adding Consultants as the project scales to include more reactors.
- Refine processes and leverage lessons learned to improve efficiency.

Deliverables:

- Monthly Project Health Reports and Reactor-Specific Performance Reviews.
 - Scalable team structure, with additional Consultants deployed as needed.
 - Annual Stakeholder Review and Renewal Plan.
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Expected Outcomes

1. Efficient Project Governance:

- Centralized oversight ensures that project health metrics are consistently monitored and optimized.

2. Localized Risk Management:

- Reactor-specific teams provide targeted support, addressing unique challenges at each site.

3. Scalable and Adaptive Support:

- The renewable PHC Service model ensures that resources grow in proportion to project needs.

4. Long-Term Sustainability:

- Regular reviews and team expansions support the successful implementation of all reactors, ensuring alignment with national energy goals.



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Cost Structure

Category	Description	Total Cost
Training and Development	Training for Stakeholders and PHC staff on system use and reporting	[undetermined]
Travel and Logistics	Travel costs for on-site setup, inspections, and team collaboration	[undetermined]
Risk Management	Risk assessment resources, including contingency planning and insurance	[undetermined]
Cloud Services/Data Storage	Data storage for project datasets and real-time reporting	\$1,900
Miscellaneous Expenses	Unexpected costs related to logistics, setup, or project adjustments	[undetermined]
PHC Setup Costs	Costs for PHC Service in Phase 1	\$61,160
PHC Continuation Costs	Costs for PHC Service in Phase 2	\$917,280

This table provides a structured overview of potential expenses, with placeholder values to be filled as budget details are finalized.

Additional Considerations

(1) The cost includes an allowance for trainees on the project as an optional use of the project’s Corporate Social Responsibility budget.

For the PHC Setup phase: 3x Trainees at a total cost of \$15,120.

For the PHC Continuation phase: 20x Trainees at a total cost of \$403,200

If the Trainee option is omitted, the PHC costs for Setup and Continuation reduce to \$47,040 and \$514,080 respectively.

(2) The table reflects the costs for PHC core elements of the Setup and Continuation phases only. Other costs remain ‘undetermined’ pending early-as-possible definition after the PHC Service start. The early stages of PHC Service implementation will help identify these additional costs.

(3) For Cloud Services, costs detailed are for access to the proprietary database from Claris Filemaker allowing 10 seats, sufficient for the PHC Team and selected operational staff from Stakeholder Groups. For the whole project workforce, PHC data is accessed via a browser-based username/password system which we provide free as part of the PHC Service offering.



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PHC Service Setup Phase							09/12/2024	
P002– Thorium Reactor	Hourly Rate to Person	PHC Provider Markup	Hourly Rate to Client	People in Role	Hours / Week	Contract Hours	Contract Cost	
Strategist	\$120	40%	\$168	1	10	120	\$20,160	
Analyst	\$80	40%	\$112	1	20	240	\$26,880	
Admin	\$45	40%	\$63	0		0	\$0	
Trainee	\$15	40%	\$21	3	20	720	\$15,120	
Guest	\$0	40%	\$0	0	0	0	\$0	
		40%		Months	3			
				1 st Contract	yes	1080	\$62,160	
Lump Sum Start	\$12,432		\$12,432	20% (applies only to 1 st Contracts)				
Monthly Split	\$16,576		\$16,576					

Month	Payment	Partner	Transfer
1	\$29,008	\$2,901	\$26,107
2	\$16,576	\$1,658	\$14,918
3	\$16,576	\$1,658	\$14,918
4			
5			

PHC Service Continuation Phase							09/12/2024	
P002– Thorium Reactor	Hourly Rate to Person	PHC Provider Markup	Hourly Rate to Client	People in Role	Hours / Week	Contract Hours	Contract Cost	
Strategist	\$120	40%	\$168	1	10	480	\$80,640	
Analyst	\$80	40%	\$112	1	30	1,440	\$161,280	
Admin	\$45	40%	\$63	3	30	4,320	\$272,160	
Trainee	\$15	40%	\$21	20	20	19,200	\$403,200	
Guest	\$0	40%	\$0	0	0	0	\$0	
		40%		Months	12			
				1 st Contract	no	25440	\$917,280	
Lump Sum Start	\$0		\$0	20% (applies only to 1 st Contracts)				
Monthly Split	\$76,440		\$76,440					

Month	Payment	Partner	Transfer
1	\$76,440	\$7,644	\$68,796
2	\$76,440	\$7,644	\$68,796
3	\$76,440	\$7,644	\$68,796
4	\$76,440	\$7,644	\$68,796
5	\$76,440	\$7,644	\$68,796
6	\$76,440	\$7,644	\$68,796
7	\$76,440	\$7,644	\$68,796
8	\$76,440	\$7,644	\$68,796
9	\$76,440	\$7,644	\$68,796
10	\$76,440	\$7,644	\$68,796
11	\$76,440	\$7,644	\$68,796
12	\$76,440	\$7,644	\$68,796
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Project Specific Links

1	Thorium Reactor Power Generation - Project Summary
2	PHC Report (including SCALPED documents)
3	PHC Portal Access
4	P002 Rate Calculator.xlsx
5	P002 Rate Calculator Setup Phase.pdf
6	P002 Rate Calculator Continuation Phase.pdf

PHC Generic Links

1	Order Efficiency Profile.pdf
2	Why Projects Break Budgets.pdf
3	PHC Activities.pdf
4	TNA Activities.pdf
5	QA-13 - The PHC Value Proposition.mp4
6	PHC in Action.mp4
7	PHC Concerns Management Scope.pdf
8	Seven PHC Lists.mp4

Sincerely,

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